

Ha teaches a special-purpose laptop computer which, if and when the cover is closed by an unauthorized person, the computer or parts thereof power down. French teaches a laptop computer with a built-in motion detector so that, should an unauthorized person move the laptop computer, an audible signal is sounded through the laptop computer's integral speaker. Patterson, by contrast, teaches a protective method for a laptop computer which, if and when the cover is closed by an unauthorized person, sounds an audible alarm through the laptop's integral speaker. Independent claims 1 and 21 require detecting closing of the laptop computer, followed by sounding of an alarm.

The U. S. Supreme Court in *Graham* set out the three tests for a *prima facie* case of obviousness, namely:

1. There must be some suggestion or motivation, either in the references themselves or in knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings.

2. There must be a reasonable expectation of success.

3. The prior art reference (or references when combined) must teach or suggest all the claimed limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not applicant's disclosure.

See MPEP § 2143.

Ha, French, and Patterson solve a similar problem, prevention of theft of laptop computers, yet they solve that problem in substantially different ways.

Ha and Patterson begin with a laptop computer with the standard features of a laptop computer, which are, a keyboard as a part of a body, a display screen as a part of a cover section connected to the body of the laptop computer, and various processing and memory circuitry. All of these components are common to all or nearly all laptop computers.

5 Laptops may have additional components, for example, a CD-ROM drive but the above list constitute the essentials for the laptop. Notwithstanding the above, Ha does not list a speaker as a necessary component although such speakers are almost universally included in personal computers, whether laptop or otherwise. Thus, the Ha computer is not an ordinary laptop computer.

10 The Ha computer includes additional special-purpose circuitry. This special-purpose circuitry consist, primarily, of what Ha terms an "Alarm Processor", 50, in Fig. 3 and a "Password Determining Section", 60 in Fig. 3. Ha, thus, does not apply to ordinary laptop computers. The laptop computers to which Ha applies are special-purpose computers designed, one assumes, from the most basic level to include the Ha invention.

15 One of the problems presented in comprehending the teachings of Ha is that terms are used inconsistently in Ha. Significant terms that cause difficulty include "alarm", "interrupt", "signal", and "warning". For example, in the Description of the Preferred Embodiment", Ha at 8, lines 58-61, refers to an "interrupt signal". If the "interrupt signal" is a "burglar interrupt signal", the alarm processor proceeds to generate a "burglar warning alarm"; if not, the alarm
20 processor generates a "normal warning alarm". It is entirely unclear what a "normal warning alarm" is. What is clear is that an alarm, in this context, cannot be audible in the absence of

any teaching of any device for generating an audible alarm. If one were to assume that a "burglar warning alarm" were some sort of audible alarm, then nothing explains what a "normal warning alarm" might be. There seems little point in sounding an alarm to indicate a situation is normal. Explanation is entirely lacking. However, it could make sense if the signals and alarms are electronic pulses, a usage consistent with standard practice in the electronic arts.

Resolution may appear in the claims themselves. Ha teaches "determining whether or not said interrupt signal is a burglar alarm signal". Ha at 9, lines 49- 50. The term "interrupt signal" is well-known in the art and refers to an electronic pulse within the circuitry. Thus, clearly, because a "burglar alarm signal" is a type of interrupt signal, a burglar alarm signal is not an audible alarm.

It becomes even more certain that Ha does not teach use of an audible alarm. Ha at 10, lines 4-5. There, Ha teaches "a means of providing the burglar alarm signal as a warning signal to the alarm processor". Since the burglar alarm signal is a type of interrupt signal and serves as a warning signal to the alarm processor - not the owner or persons within earshot - which alarm processor is without question a component of the hardware, a "warning signal" is an electronic pulse which cannot be audible.

Ha, thus, in excluding both "signals" and "alarms" as something other than audible teaches away from Patterson which teaches an audible alarm.

Another important distinction between the Patterson invention and the Ha invention was noted above. Ha teaches a hardware solution to the problem while Patterson teaches a

software solution. This means that, to implement Ha, one must have either the particular laptop computer described in Ha or must have a laptop computer to which the special-purpose circuitry taught by Ha has been added and, one assumes, no speaker is included. In essence, Ha is limited to some device other than an ordinary laptop computer; Ha teaches a special-purpose computer. Patterson, however, requires no additional circuitry and can be applied to any general-purpose laptop computer. There is nothing in Ha to suggest in any way that the teachings can be implemented in any device other than in one of the special computers with the Ha circuitry.

French teaches integrating a motion detector into a laptop computer and, if the computer is moved, an audible alarm is sounded. Nothing in French teaches or suggests setting off audible alarm upon detecting only that the cover of the laptop computer is closed.

The French laptop computer is, like the Ha laptop computer, special-purpose in that it has additional circuitry, this time for motion-detection. Patterson, as noted above, requires no special hardware to implement its teachings.

Were the teachings of Ha and French to be combined, they would not result in the teachings of Patterson. Ha teaches detection of closing the cover without causing any audible alarm. The French teachings describe a laptop computer that must be moved in order to sound an audible alarm. In combination, then, one would both have to close the cover and move the laptop computer to sound an audible alarm. Because Patterson teaches detecting nothing more than closing the cover, which closing sets off the alarm, the combination of Ha and French do not suggest the solution of Patterson.

With respect to use of the computer speaker as the means of emitting the audible alarm, the speaker is a fundamental component of nearly all laptop computers although the Ha computer does not claim to include one. Combining existing components in novel ways is what much invention is about. The courts have stated this repeatedly. Using a device in its intended way does not preclude patentability. The invention must be seen as a whole. This invention teaches the use of the speaker to sound an audible alarm upon detection that the cover is closed. French teaches the use of the speaker to sound an audible alarm upon detection that the computer is being or has been moved. The two inventions arrive at the sounding of the audible alarm in two very different ways. This is no more remarkable nor does it form the basis for determination that a claim is obvious than that Ha and French as well as locks and chains and cables are all directed toward the same goal of preventing computer theft.

The position taken by the examiner pulls the Patterson invention apart, finds some parts in other art, then recombines them. Ha may teach detecting closing the cover; French may teach using the speaker to sound an audible alarm. Neither teaches the two together. Moreover, a combination of Ha and French would not teach or suggest the claimed theft protection method wherein an alarm is sounded when the cover of a laptop computer is closed.

With respect to the individual claim rejections, it would seem that the examiner, in rejecting claim 2, has mistaken the meaning of "interrupt" in much the same way Ha does. An "interrupt" is either an electronic pulse sent to a specified portion of a computer's

processor or it is the result of that pulse. The examiner is directed to the discussion of interrupt handling or interrupt processing which begins on page 8 of the application. There is also some discussion, albeit not without flaws on the subject of polling, in Example 3 (on page 19 of the Kayton reprint) of "Revised Interim Written Description Guidelines Training Materials". See attached.

As set out in the application, page 8 *et seqs.*, an "interrupt" in the sense used in Patterson's teachings is a temporary cessation of flow of control of the computer's processor with a consequent transfer of control to a location specified in an interrupt vector. Ha is inconsistent in usage of the term. Ha, at 11, line 17, refers to shutting down the power to the computer by "interrupting" it. This sense is contrary to the sense of the term as Ha used it at 9, line 50 ("interrupt signal"). The examiner at 3 and 4 refers to "computer disabling features". Patterson, contrary to the assertion of the examiner, makes no claim regarding computer disabling features.

The examiner, when referring to claims 3-11 on page 4, contends that Ha and French made obvious the method taught by Patterson. Patterson teaches trapping the interrupt location for the cover-closed interrupt. While it may be that Ha teaches something related to interrupts, Ha does not teach trapping the interrupt. Ha teaches a method of hardware detection, by the alarm processor, of whether the interrupt is one of a number of types of interrupts. Essentially, Ha teaches away from Patterson in that the flow of control in Ha is from a cover switch to the alarm processor, bypassing the interrupt vector altogether. There is no trapping, no indirect addressing, no software control.

French teaches away from Patterson in that French teaches use of a motion detector which directly sounds an audible alarm. The processor of the laptop in French plays no role in getting to the point of sounding that alarm. French teaches away from any method of detecting a cover-closed condition thus French teaches away from interrupt handling and, as a result, teaches away from the teachings of Patterson. Even the combination of Ha and French do not suggest interrupt trapping as a step in the process of causing an audible alarm to sound.

In his reference to Claim 12, the examiner contends, at 5, "The alarm generation is through the laptop computer speaker in the system taught by Ha et al. and French, whereby a conventional laptop computer has a user selectable speaker on/mute or enabled/disabled function." This is not at all what Ha claims. As explained above, Ha does not claim a speaker for emitting sound as a limitation of the Ha computer. Also, Ha teaches a use of the term "alarm" to mean a signal from one circuit to another. In the claims, the term "alarm" is used consistently to refer to electronic pulses. The term "alarm" appears in all but one context as an adjective and that exception is in claim 12 in which it appears as "warning alarm". Ha teaches at 8, lines 59-60, that a warning alarm is a type of signal. Nowhere does Ha teach "generating the alarm through the speaker" as set out at 5 by the examiner.

The examiner's comments on Claims 13-18 by which the various password and hot-key claims are rejected, can be dealt with as an extension of the above. Ha, as set out above, does not refer to an audible alarm. Thus, looking at Ha alone, whatever method Patterson teaches for enabling and/or disabling the audible alarm cannot be said to have been suggested

by Ha because the suggestions of Ha deal with electronic signals not audible alarms. That being the case, it is not necessary to deal again with the teachings of French because they are limited to alarms set off by a motion detector.

By similar reasoning, the comments of the examiner regarding claims 21 through 28 - those claims of Patterson directed to a method of polling status locations - can be dealt with. Ha teaches a special-purpose computer in which a switch actively transfers control to an alarm processor. Claims 21-28 of Patterson teach what might be termed a "passive" method, that is, polling by which the operating system or other software polls a status location to determine whether the cover is closed. This method of polling is common in computers lacking interrupt processing for the given situation. Neither Ha nor French teach anything at all about what to do if the laptop computer is equipped with neither an interrupt processor nor a motion detector.

Conclusion:

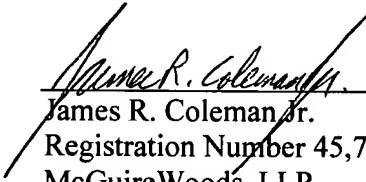
Thus, as clearly described above, the features of the claimed invention are not disclosed by Ha , even in combination with French , and thus the claimed invention defined by claims 1-30 is patentable.

In view of the foregoing, Applicant submits that all the claims presently pending in the application are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application at issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

5 If an extension of time is required for this response to be considered timely filed, a provisional petition is hereby made for any extension of time necessary. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 23-1951.

Respectfully submitted,


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